

## adinstbpm - Task #18324

Milestone # 17719 (New): Booster operational test of one crate alongside existing BPM system

### Implement polynomial scaling

11/16/2017 04:26 PM - John Diamond

<b>Status:</b>	Resolved	<b>Start date:</b>	11/16/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	John Diamond	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	2.00 hours
<b>Target version:</b>		<b>Spent time:</b>	1.00 hour
<b>Description</b>			
Peter wants 5th order polynomial scaling.			

### History

#### #1 - 11/17/2017 11:30 AM - John Diamond

- % Done changed from 0 to 90

Implemented n-order polynomial scaling (up to 9 but that is easily expanded). Made the first coefficient the offset and changed the linear scaling method to do this as well for consistency-sake.

Also modified BBPM250x12 to scale position readings according to the coefficients that Peter gave me.

Could not obtain a beam signal because we're still having problems with Peter's clock decoder so I couldn't test against beam.

#### #2 - 11/17/2017 02:40 PM - John Diamond

- Status changed from Work in progress to Resolved

- % Done changed from 90 to 100

Verified with beam via BBPM250x12 ACNET. Position results look good.